

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

GeoSymm Ventures LLC,

Plaintiff,

v.

PTC Inc.,

Defendant.

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§ C.A. NO. 6:23-cv-00493-ADA
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§ ORAL HEARING REQUESTED
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DEFENDANT’S MOTION TO DISMISS COMPLAINT (DKT. 1)
FOR FAILURE TO STATE A CLAIM FOR RELIEF

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I. INTRODUCTION: PLAINTIFF’S COMPLAINT LACKS THE NECESSARY SPECIFICITY TO PLACE DEFENDANT ON NOTICE OF THE ALLEGATIONS.

The Complaint should be dismissed for failing to plausibly allege that Defendant PTC Inc. (“PTC” or “Defendant”) directly and indirectly infringes the Asserted Patents.¹ The Asserted Patents generally relate to systems and methods directed towards augmented reality (“AR”), specifically, registering physical world coordinates of a unique digitally encoded marker (“DEM”) in the physical world—embedded with geographic coordinate data—to the relative coordinates of an AR system. Plaintiff’s allegations, however, suffer a fatal flaw—none of the accused functionalities perform the key claimed limitation: decoding coordinate data from a DEM. Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6. In response to Plaintiff’s insufficient pleading, Defendant moves under Rule 12(b)(6) to dismiss the Complaint for failure to state a claim upon which relief can be granted because it lacks the required specificity for pleading a cause of action under Rule 8 and *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007).

First, Plaintiff fails to plausibly state a claim for direct infringement because Plaintiff has not alleged that Defendant’s accused products have met every limitation of the claims. To “survive a Rule 12(b)(6) motion on a direct infringement claim, the plaintiff must plead facts that plausibly, ***not merely possibly***, suggest that the accused product meets each limitation of the asserted claim(s).” *Ortiz & Assocs. Consulting, LLC v. Ricoh USA, Inc.*, No. 6:21-cv-01178-ADA, 2023 WL 2904583, at *7 (W.D. Tex. April 11, 2023) (citing *LBT II, LLC v. Uber Techs., Inc.*, No. 6:21-cv-01210-ADA, 2022 WL 2329321 (W.D. Tex. June 28, 2022)) (emphasis added). Plaintiff offers

¹ Plaintiff asserts the following three patents against Defendant: U.S. Patent Nos. 10,242,456 (“the ’456 Patent”), 10,489,930 (“the ’930 Patent”), and 11,080,885 (“the ’885 Patent”) (collectively, “the Asserted Patents”). Dkt. No. 1.

nothing more than barebone facts to support conclusory allegations that Defendant infringes the Asserted Patents. *See* Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6.

Most fatally, however, Plaintiff’s charted allegations of infringement are factually incorrect, and contradictory to its own supporting documentation. None of the charted accused functionalities perform the claimed decoding of coordinate data from a DEM limitation—limitations explicitly incorporated into the Asserted Patents during prosecution to overcome § 103 rejections issued by the Examiner. Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6; *see also infra* § II.C. Yet, despite these clear explicit claim limitation requirements, Plaintiff failed to identify embedded coordinate data in a DEM in the mapped functionality of accused products. Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6. In fact, Plaintiff’s cited support to its pleadings and accompanying claim charts demonstrates that the mapped accused functionality does not embed coordinate data in a DEM, and thus each allegation fails to plead the critical claim limitation of *decoding* coordinate data from the DEM. The Complaint thus fails to provide sufficient factual allegations to draw a reasonable inference of direct infringement. *Iqbal*, 556 U.S. at 678.

Second, Plaintiff’s conclusory indirect infringement allegations also should be dismissed. For indirect infringement, the Complaint must also plead facts supporting an inference of defendant’s “knowledge of the patent in suit and knowledge of patent infringement.” *Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632, 639 (2015). The Complaint fails to plead the necessary facts supporting an inference of indirect infringement. For instance, Plaintiff’s pleadings of *actual* knowledge, however, are solely based on Defendant’s purported knowledge of the Asserted Patents only as of the date of service of the Complaint—which this Court has repeatedly found insufficient under the *Iqbal/Twombly* standard. *Ortiz*, 2023 WL 2904583, at *7. Plaintiff also fails to allege other key legal requirements, including specific intent for induced infringement beyond

conclusory allegations—which, again, this Court has repeatedly found insufficient. *Parity Networks, LLC v. Cisco Sys., Inc.*, No. 6:19-cv-00207-ADA, 2019 WL 3940952, at *2 (W.D. Tex. July 26, 2019).

II. BACKGROUND: THE COMPLAINT RESTS ON BAREBONE CONCLUSORY STATEMENTS.

A. The Complaint

On July 13, 2023, Plaintiff filed the Complaint. Dkt. No. 1. As noted below (*infra* § IV.A-B), however, Plaintiff failed to plead sufficient facts supporting allegations of direct and indirect infringement.

B. Exemplary Defendant Products

Plaintiff alleges that by “making, using, offering to sell, selling, and/or importing” the “Defendant products identified in the charts incorporated” that Defendant allegedly infringes the Asserted Patents. Dkt. No. 1 ¶¶ 13, 22, 31; *see also id.*, Exs. 4-6. Plaintiff only specifically identifies in the incorporated charts the following systems: “Vuforia View application for iOS and Android,” “Vuforia Studio application,” and “Vuforia Experience Service.” *Id.*

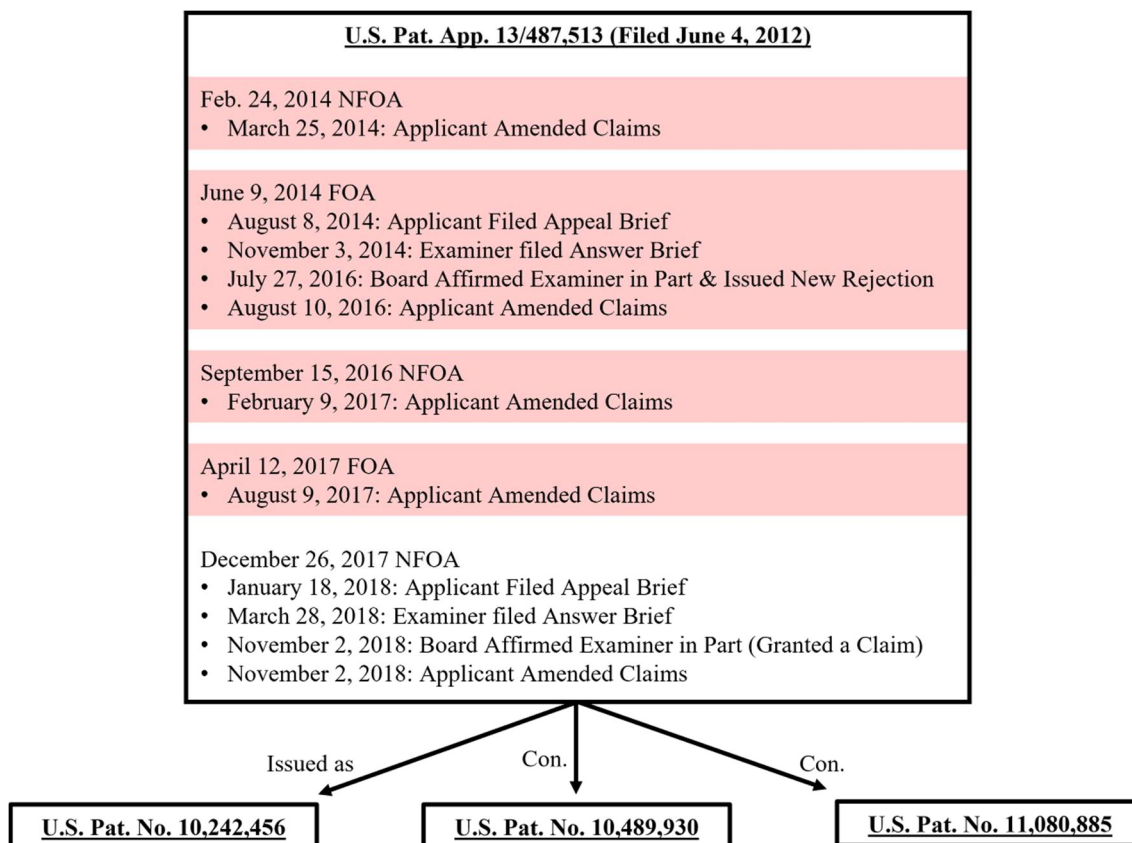
C. The Asserted Patents and Claims

The Asserted Patents disclose systems and methods for AR, specifically, registering physical world coordinates of a digitally DEM to the relative coordinates of an AR system. Dkt. No. 1, Ex. 1 (2:53-3:5). The disclosed “DEM-based AR system achieves this functionality without the need for traditional geo-location or marker techniques,” and instead with the “use of a geo-located marker.” *Id.*, 5:37-47. The system renders the AR experience on the user’s device by extracting the geo-location metadata encoded in the geo-located digital marker. *Id.*, 2:45-3:4. For example, the “method taught and claim[] involves encoding data in the form of geographic world coordinates and optional metadata onto high-contrast markers, which may be labeled ‘Digitally

Encoded Markers’ or DEMs. The DEMs differ from prior markers as they are encoded with metadata including world geographic coordinates,” and other “user geographic information (such as a street address, a postal code, or a city).” Ex. A, pp. 8-9. The method then further “register[s] the geographic world coordinates on the DEM to the relative coordinates in the AR system to accurately superimpose digital data onto the real world to produce an AR experience viewable by a user in real time.” *Id.*

1. Prosecution History of U.S. Pat. App. No. 13/487,513

All three of the Asserted Patents stem directly from U.S. Patent Application No. 13/487,513. The first Asserted Patent, the ’456 Patent, issued from this application on March 26, 2019, while the second and third Asserted Patents (the ’930 and ’885 Patents) were continuations of the application issuing November 26, 2019, and August 3, 2021, respectively. Dkt. No. 1, Exs. 1-3. The application underwent extensive prosecution at the United States Patent and Trademark Office. *See infra* Chart Summarizing Prosecution History. Nevertheless, at every stage of prosecution of the underlying application and the subsequent continuations, the Applicant reiterated that the claimed methods disclose a unique DEM embedded with coordinate data.



For instance, in its March 25, 2014 response to the first non-final office action dated February 24, 2014, the Applicant confirmed that the claimed methods require a unique DEM embedded with geographic coordinate data. To overcome a § 103 rejection, the applicant argued that the method “uses a DEM that has on it geographic coordinate data that can be decoded to determine a marker location in a physical environment.” Ex. B, p. 7. And “[t]here is, hence, no need to rely upon GPS or other sensors to determine the physical location of the DEM, which is desirable because (as discussed in Applicant’s Background) the accuracy of such sensors is often not high enough to support effective AR image generation and positioning of overlays/virtual objects in an AR image (*e.g.*, GPS is often only accurate to within 3 to 10 feet which would not [be] accurate enough for many AR applications).” *Id.* Applicant further argued that the cited *Tapley* reference failed to teach the claimed “decoding data from the identified DEM including geographic coordinate data defining the marker location in the physical environment” because *Tapley* merely

teaches a marker “includ[ing] an ID and items/markings useful for determining an orientation of the marker 400 in a captured image and even for use in detecting a distance from the camera to the marker (*e.g.*, to allow the image of the marker 400 to be processed to scale a displayed overlay image).” Ex. B, p. 8.

Then in its August 8, 2014 First Appeal Brief responding to the office action dated June 9, 2014, Applicant affirmed yet again that the claimed method requires a unique DEM embedded with geographic coordinate data. Ex. A, pp. 10-11 (further stressing that “Applicant actually encodes information for retrieving an image AND where to place it in a physical environment”). The USPTO Board on July 27, 2016, affirmed the Examiner’s rejection in-part and issued additional rejections for the remaining claims.

On February 9, 2017, in response to the September 15, 2016 rejection, Applicant further limited its claims. Applicant argued that *Tapley* teaches “processing the image to determine where the marker or placeholder is located relative to the physical environment without decoding data including geographic coordinate data.” Ex. C, p. 10. And “[s]pecifically, *Tapley* in para. [0027] states that the module 228 ‘may determine characteristics including coordinates and general location of the placeholder in the contextual environment captured by the camera’ such that it is clear *Tapley* is teaching processing the camera-captured image to find the placement information (including the coordinates and general location) of the marker/placeholder and not decoding coordinates on the placeholder.” *Id.*

In its January 18, 2018 Second Appeal Brief responding to the office action dated December 26, 2017, Applicant affirmed yet again that the claimed method requires a unique DEM embedded with coordinate data. Ex.D, pp. 1-3 (emphasizing that “Appellant’s techniques and technology allow a user to place a DEM (encoded with its own coordinate data)”). Applicant

further distinguished from a newly cited reference, *Chow*, and its teachings determining vendor locations by associating database information with QR code and UPC label scanning. Ex. D, pp. 2-3. Applicant argued that “such embedded information is useful for identifying locations of vendors selling a product,” it nevertheless failed to teach the claimed “relative coordinate data ‘defining the marker location in the physical environment’ as required by Appellant’s claim[s].” *Id.* Specifically, the *Chow* labels “(which may take the form of the exemplary QR code in Figure 35 of *Chow*) are NOT encoded with data defining the location of the label or QR code in a physical environment.” *Id.*

On November 2, 2018, for the Second Appeal, the Board affirmed the Examiner’s rejection in part but reversed the Examiner’s rejection of dependent claim 21, reciting “wherein the displaying further comprises registering the at least one of the geographic coordinate data and the relative coordinate data, decoded from the DEM, to relative coordinates in the augmented reality image.” Ex. E, pp. 6-7. The Applicant subsequently incorporated this limitation into its independent claim and the application was allowed (issuing as the ’456 Patent).

2. Asserted Claims

Plaintiff now asserts the first independent claim for each of the three Asserted Patents. The below chart depicts the claim the Board rejected on November 2, 2018 (red) for U.S. Pat. App. No. 13/487,513, compared to the respective Asserted Claims here. Ex. E, pp. 6-7. The lone asserted claim from the ’456 Patent, with the exception to the added “registering” limitation, is identical to the claim the Board rejected under § 103 in view of *Tapley* and *Chow* (among other cited references). *Id.* The respective asserted claims from the ’930 and ’885 Patents are similar in scope to the claim the Board rejected on November 2, 2018, as well.

Nov. 2018 USPTO Board Rejected Claim	The ’456 Patent	The ’930 Patent	The ’885 Patent
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[P] An augmented reality (AR) method comprising:	[1P] An augmented reality (AR) method comprising:	[1P] A method of providing an augmented reality experience with a user device, comprising:	[1P] A method of providing an augmented reality experience with a user device, comprising:
[A] operating a camera of the user device to acquire an input image of a physical environment, wherein a digitally encoded marker (DEM) is positioned at a marker location within the physical environment;	[1A] operating a camera of the user device to acquire an input image of a physical environment, wherein a digitally encoded marker (DEM) is positioned at a marker location within the physical environment;	[1A] operating a camera of the user device to acquire an input image of a physical environment, wherein a digitally encoded marker (DEM) is positioned at a marker location within the physical environment;	[1A] receiving an input image of a physical environment from a camera included in or on the user device, wherein a digitally encoded marker (DEM) is positioned at a marker location within the physical environment;
[B] with a processor, processing the input image to identify the DEM in the input image;	[1B] with a processor, processing the input image to identify the DEM in the input image;	[1B] with a processor running a marker decoder utility,	
[C] decoding data from the identified DEM including at least one of geographic coordinate data and relative coordinate data defining the marker location in the physical environment, wherein the decoding is performed without calculating coordinates of the DEM in the physical environment;	[1C] decoding data from the identified DEM including at least one of geographic coordinate data and relative coordinate data defining the marker location in the physical environment, wherein the decoding is performed without calculating coordinates of the DEM in the physical environment;	[1B-continued] decoding data from the DEM by processing the input image, wherein the decoded data comprises at least one of geographic coordinate data and relative coordinate data;	[1B] decoding data from the DEM by processing the input image, wherein the decoded data comprises at least one of geographic coordinate data and relative coordinate data;
[D] from memory of the user device, retrieving digital data of a virtual object, wherein the virtual object is a 3D digital	[1D] from memory of the user device, retrieving digital data of a virtual object, wherein the virtual object is a 3D digital	[1C] from memory of the user device, retrieving digital content for a virtual object; and	[1C] retrieving digital content for a virtual object; and

model;	model; and		
[E] displaying an augmented reality image comprising at least a portion of the input image and an overlay image, corresponding to the retrieved digital data, positioned within the augmented reality image based on the decoded data from the DEM and the marker location, as defined by the at least one of the geographic coordinate data and the relative coordinate data, in the physical environment associated with the input image;	[1E] displaying an augmented reality image comprising at least a portion of the input image and an overlay image, corresponding to the retrieved digital data, positioned within the augmented reality image based on the decoded data from the DEM and the marker location, as defined by the at least one of the geographic coordinate data and the relative coordinate data, in the physical environment associated with the input image,	[1D] displaying an augmented reality image, on a display screen of the user device, including the input image and an overlay image representing the virtual object positioned within the augmented reality image based on the decoded data from the DEM and the marker location;	[1D] displaying an augmented reality image, on a display screen of the user device, including the input image and an overlay image representing the virtual object positioned within the augmented reality image based on the decoded data from the DEM and the marker location,
[F] wherein the overlay image is positioned within the augmented reality image using the at least one of the geographic coordinate data and the relative coordinate data.	[1F] wherein the overlay image is positioned within the augmented reality image using the at least one of the geographic coordinate data and the relative coordinate data, and.	[1E] wherein the overlay image is positioned within the augmented reality image using the at least one of the geographic coordinate data and the relative coordinate data decoded from the DEM without calculating coordinates of the DEM in the physical environment, and	[1E] wherein the overlay image is positioned within the augmented reality image using the at least one of the geographic coordinate data and the relative coordinate data decoded from the DEM.
	[1G] wherein the displaying further comprises registering the at least one of the geographic coordinate data and the relative coordinate data, decoded from the	[1F] wherein the displaying further comprises registering the at least one of geographic coordinate data and the relative	

	DEM, to relative coordinates in the augmented reality image.	coordinate data, decoded from the DEM, to relative coordinates in the augmented reality image.	
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D. Allegations of Direct Infringement

Plaintiff asserts direct infringement of the Asserted Patents using the same generic and conclusory language for every patent. *E.g.*, Dkt. No. 1 ¶¶ 13, 22, 31. First and foremost, Plaintiff fails to identify how the Exemplary Defendant Products infringe the respective decoding of the unique DEM embedded with coordinate data claim element for each Asserted Patent. For instance, the '456 Patent requires “decoding data from the identified DEM **including at least one of geographic coordinate data and relative coordinate data defining the marker location in the physical environment.**” The '930 Patent requires “decoding data from the DEM by processing the input image, wherein the decoded data comprises **at least one of geographic coordinate data and relative coordinate data.**” And the '885 Patent requires “decoding data from the DEM by processing the input image, **wherein the decoded data comprises at least one of geographic coordinate data and relative coordinate data.**” All three of these claim limitations require decoding geographic coordinate data embedded in the DEM, however, Plaintiff fails to identify embedded coordinate data in the mapped “ThingMark” functionality of the Exemplary Defendant Product—because there is none, and Plaintiff’s cited support fails to identify any such coordinate data. Dkt. No. 1, Exs. 4-6. Thus, none of these pleadings provide sufficient notice of Plaintiff’s infringement theories.

E. Allegations of Indirect Infringement

Plaintiff also asserts indirect infringement of the Asserted Patents using the same generic and conclusory language for every patent. First, Plaintiff fails to identify specific acts of direct

infringement. *E.g.*, Dkt. No. 1 ¶¶ 17, 26, 35. Second, without describing accused acts by Defendant or its customers, and without describing facts that Defendant knowingly and actively directed others to infringe, Plaintiff then concludes that “Defendant has actively, knowingly, and intentionally continued to induce infringement” of the Asserted Patents. *Id.* None of these pleadings provide sufficient notice of Plaintiff’s infringement theories.

III. STATEMENT OF LAW: A COMPLAINT MUST PROVIDE FAIR NOTICE OF THE GROUNDS IT RELIES ON.

A. Direct Infringement

A complaint should be dismissed if it “fail[s] to state a claim upon which relief can be granted.” It must include more than “a formulaic recitation of the elements of a cause of action.” *Twombly*, 550 U.S. at 555; *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). The plaintiff must allege non-conclusory facts that make liability “plausible,” meaning the facts “allow[] the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 678 (2009). “Threadbare recitals of the elements of a cause of action, supported by mere conclusory statements, do not suffice.” *Id.* And “bald assertions” should be disregarded. *Mass. Inst. of Tech. v. Shire PLC*, No. 1:13-CV-10020-MLW, 2014 WL 404696, at *7 (D. Mass. Feb. 2, 2014) (quoting *In re Citigroup, Inc.*, 535 F.3d 45, 52 (1st Cir. 2008)).

Moreover, the “level of detail required in any given case will vary depending upon a number of factors, including the complexity of the technology, the materiality of any given element to practicing the asserted claim(s), and the nature of the allegedly infringing device.” *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1352 (Fed. Cir. 2021). However, “a plaintiff cannot assert a plausible claim for infringement under the *Iqbal/Twombly* standard by re-citing the claim elements and merely concluding that the accused product has those elements.” *Id.*; *see also Qwikcash, LLC v. Blackhawk Network Holdings, Inc.*, No. 4:19-cv-876-SDJ, 2020 U.S. Dist. LEXIS 215341, *7-

8 (E.D. Tex. Nov. 17, 2020) (stating that fair notice “requires the plaintiff to plausibly allege that the accused products meet each and every element of at least one claim of the asserted patent”) (internal quotation marks omitted); *see also Ruby Sands LLC v. Am. Nat’l Bank of Tex.*, No. 2:15-cv-1955, 2016 U.S. Dist. LEXIS 83897, *12 (E.D. Tex. Jun. 28, 2016) (“a plaintiff’s obligation to provide the ‘grounds’ of his ‘entitlement to relief’ requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do”) (quoting *Twombly*, 550 U.S. at 555).

In sum, to “survive a Rule 12(b)(6) motion on a direct infringement claim, the plaintiff must plead facts that plausibly, *not merely possibly*, suggest that the accused product meets each limitation of the asserted claim(s).” *Ortiz*, 2023 WL 2904583, at *7 (citing *LBT II, LLC v. Uber Techs., Inc.*, No. 6:21-cv-01210-ADA, 2022 WL 2329321 (W.D. Tex. June 28, 2022)) (emphasis added).

B. Indirect (i.e., Induced) Infringement

To plead indirect infringement, the complaint must first plead direct infringement by a third party. *See Intell. Ventures I LLC v. Motorola Mobility LLC*, 870 F.3d 1320, 1331 (Fed. Cir. 2017) (“[A] finding of direct infringement is predicate to any finding of indirect infringement”); *Enplas Display Device Corp. v. Seoul Semiconductor Co., Ltd.*, 909 F.3d 398, 407 (Fed. Cir. 2018); *Ortiz*, 2023 WL 2904583, at *7. The complaint must also plead facts supporting an inference of the defendant’s “knowledge of the patent in suit and knowledge of patent infringement.” *Commil*, 575 U.S. at 639; *see Addiction & Detoxification Inst. L.L.C. v. Carpenter*, 620 F. App’x 934, 938 (Fed. Cir. 2015).

To state a claim for relief for induced patent infringement, “a complaint must plead facts plausibly showing that the accused infringer ‘specifically intended [another party] to infringe [the [patent] and knew that the [other party]’s acts constituted infringement.”” *Lifetime Indus., Inc. v.*

Trim-Lok, Inc., 869 F.3d 1372, 1376-77 (Fed. Cir. 2017) (quoting *In re Bill of Lading Transmission & Processing Sys. Pat. Litig.*, 681 F.3d 1323, 1336 (Fed. Cir. 2012)). “[T]here can be no inducement or contributory infringement without an underlying act of direct infringement.” *Joao Control & Monitoring Sys., LLC v. Protect Am., Inc.*, No. 1:14-cv-00134-LY, 2015 WL 3513151, at *3 (W.D. Tex. Mar. 24, 2015).

IV. ARGUMENT: PLAINTIFF’S THREADBARE COMPLAINT FAILS TO PROPERLY STATE A CLAIM UPON WHICH RELIEF MAY BE GRANTED AND SHOULD BE DISMISSED.

A. Plaintiff Fails to State a Claim for Direct Infringement

Plaintiff’s direct infringement claims against Defendant should be dismissed for failure to state a claim and failure to plead sufficient facts to “state a claim to relief that is plausible on its face.” *Iqbal*, 556 U.S. at 678 (quoting *Twombly*, 550 U.S. at 570). Instead, Plaintiff pleads only “[t]hreadbare recitals of the elements of a cause of action, supported by mere conclusory statements, [which] do not suffice.” *Id.*; see Dkt. No. 1 ¶¶ 13, 22, and 31. As “[m]erely identifying the entire system and directing the Court and the Defendant[] to the claims of the [Asserted Patent] to determine what aspect of the system infringes is not enough” to state a claim for direct infringement. *Traxcell Techs., LLC v. Verizon Wireless Pers. Commc’ns LP*, No. 6:20-cv-01175-ADA, 2022 WL 299732, at *3 (W.D. Tex. 2022) (quoting *Fenner Invs., Ltd. v. Cellco P’ship*, No. 6:11-cv-0348, 2012 WL 12785031, at *2 (E.D. Tex. Mar. 27, 2012)); see also *Innomemory, LLC v. Cullen/Frost Bankers, Inc.*, No. 6:22-cv-00672-ADA, at *4 (W.D. Tex. Sept. 30, 2022).

Plaintiff’s allegations, however, suffer a fatal flaw—none of the charted Exemplary Defendant Products or functionalities perform the critical claim element for each respective Asserted Patent of decoding coordinate data from a DEM in the physical world. Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6. Each Asserted Patent explicitly requires this claim limitation: (1) the ’456 Patent requires “decoding data from the identified DEM **including at least one of geographic**

coordinate data and relative coordinate data defining the marker location in the physical environment;” (2) the ’930 Patent requires “decoding data from the DEM by processing the input image, wherein the decoded data comprises **at least one of geographic coordinate data and relative coordinate data;**” and (3) the ’885 Patent requires “decoding data from the DEM by processing the input image, **wherein the decoded data comprises at least one of geographic coordinate data and relative coordinate data.**” These limitations are critical and were explicitly incorporated into the claim language during prosecution to overcome § 103 rejections.

Yet, despite these clear explicit claim limitation requirements, Plaintiff fails to identify embedded coordinate data in the physical “ThingMark” it mapped to the DEM. Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6. In fact, the references Plaintiff relies on in its pleadings and accompanying claim charts clearly demonstrate that the mapped “ThingMark” does not encode coordinate data on the digital marker—and thus each allegation fails to plead the critical claim limitation of *decoding* coordinate data from the DEM. Instead, the only coordinate data cited in the charts relates to the attributes of “ThingMark widget,” which is a widget in the design software located on the virtual drawing. The Plaintiff’s charts do not contend that the virtual “ThingMark widget” is a DEM; it cannot do so because the widget does not exist in the physical world like the claimed DEM. The Complaint thus fails to provide sufficient factual allegations to draw a reasonable inference of direct infringement. *Iqbal*, 556 U.S. at 678.

1. Decoding Coordinate Data from the Digital Encoded Marker is a Key Claim Limitation to the Asserted Claims

The scope of Plaintiff’s infringement theories is limited by the Asserted Patents’ prosecution history. As discussed above (*see supra* § II.C.1), the Applicant argued multiple times that decoding coordinate data from its unique DEM was a key limitation for overcoming § 103 rejections and cited prior art references. The Applicant confirmed that the claimed methods require

a unique DEM in the physical world embedded with geographic coordinate data. Ex. B, p. 7 (further arguing that “[t]here is, hence, no need to rely upon GPS or other sensors to determine the physical location of the DEM”). Thus, any infringement theories must likewise adhere to those limitations requiring a unique DEM embedded with coordinate data.

In fact, the claimed embedded DEM data required more than identification data and orientation data; it required *actual physical environment coordinate* data. To overcome a § 103 rejection, the Applicant argued that the cited *Tapley* reference failed to teach the claimed “decoding data from the identified DEM including geographic coordinate data defining the marker location in the physical environment” because *Tapley* merely taught a marker “includ[ing] an ID and items/markings useful for determining an orientation of the marker 400 in a captured image and even for use in detecting a distance from the camera to the marker (*e.g.*, to allow the image of the marker 400 to be processed to scale a displayed overlay image).” Ex. B, p. 8. And thus, Applicant argued that *Tapley* failed to teach the necessary “geographic coordinate data encoded on/in it” as required by the claims. *Id.*

And the claimed system further had to derive the geographic coordinate data by decoding metadata from the DEM *only*, not from any other system sensor. For instance, to again overcome *Tapley* and a § 103 rejection, the Applicant argued *Tapley* taught deriving location data by processing camera images, not processing coordinate data embedded in the DEM. Ex. C, p. 10 (noting that *Tapley* taught “processing the image to determine where the marker or placeholder is located relative to the physical environment without decoding data including geographic coordinate data;” and “*Tapley* in para. [0027] states that the module 228 ‘may determine characteristics including coordinates and general location of the placeholder in the contextual environment captured by the camera’ such that it is clear *Tapley* is teaching processing the camera-

captured image to find the placement information (including the coordinates and general location) of the marker/placeholder and not decoding coordinates on the placeholder.”) Similarly, for another § 103 rejection in view of the cited *Chow* reference, Applicant further distinguished these claims from prior art teaching determining locations by searching database information via QR code and UPC label scanning. Ex. D, pp. 2-3 (Specifically, the *Chow* labels “(which may take the form of the exemplary QR code in Figure 35 of *Chow*) are NOT encoded with data defining the location of the label or QR code in a physical environment.”)

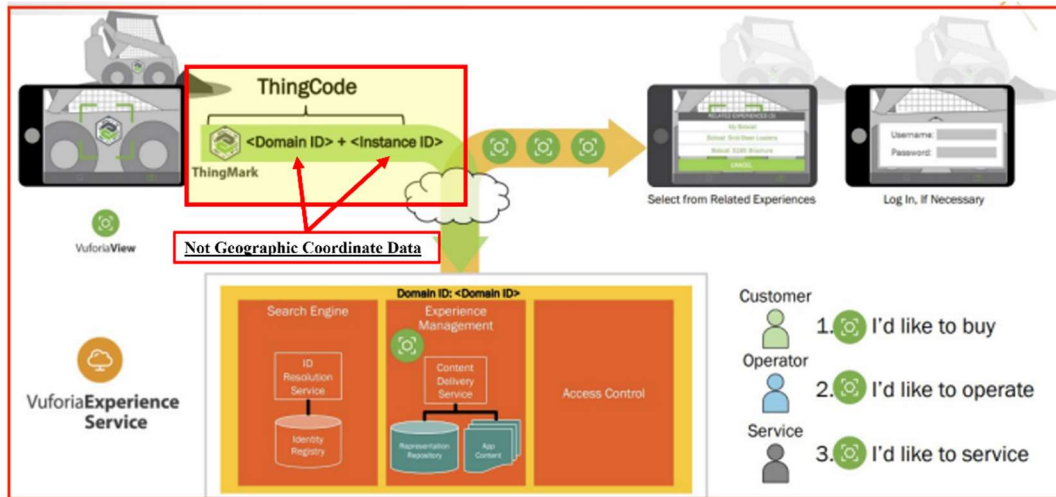
Thus, these claims require more than deducing location data from processing images—but decoding coordinate metadata embedded in the DEM.

2. The Exemplary Defendant Products Do Not Encode a Marker with Coordinate Data for Decoding

For each Asserted Patent, Plaintiff’s pleadings fail to map the claim element, decoding coordinate data from a DEM, to the accused functionality. Dkt. No. 1 ¶¶ 13, 22, and 31; *id.*, Exs. 4-6. For each Asserted Patent, Plaintiff maps the “ThingMark” Exemplary Defendant Product functionality to this claim limitation. *See* Dkt. No. 1, Ex. 4, p. 17 (“The Vuforia View app scans the ThingMark (‘identified DEM’) and decodes the pattern on the ThingMark to obtain x, y, and z coordinates”); *id.*, Ex. 5, pp. 13-14 (same); *id.*, Ex. 6, pp. 11-12 (same). The ThingMark functionality, however, does not embed geographic coordinate data, as the only embedded data in the ThingMark are ID data, the “<domain ID>” and the “<Instance ID>.” *See, e.g., id.*, Ex. 4, p. 4.

The materials Plaintiff cites in the Complaint further confirm that the mapped ThingMark functionality does not include embedded coordinate data as required by these claims. For instance, as demonstrated in the image below, the “ThingCode” for the ThingMark embeds the ID data, the “<domain ID>” and the “<Instance ID>,” not any coordinate data. Dkt. No. 1, Ex. 4, p. 4 (Annotated chart for the ’456 Patent). The Complaint and claim charts fail to cite any other support

that the mapped ThingMark functionality includes encoded coordinate data as required by the Asserted Claims. Dkt. No. 1, Ex. 4, p. 17; Ex. 5, pp. 13-14; Ex. 6, pp. 11-12.



Source:

https://community.ptc.com/sejnu66972/attachments/sejnu66972/CommunityNetworkingDiscussions/1027/1/455_Gerdes_20160624_1359.pdf Page 36

In fact, the accused ThingMark includes no more functionality than the *Tapley* reference which the Applicant explicitly claimed away from during prosecution to overcome § 103 rejections, thus Plaintiff is barred from expanding the scope here to encompass the Exemplary Defendant Products functionality. For instance, *Tapley* taught a marker “includ[ing] an ID” and markings “useful for determining an orientation of the marker 400 in a captured image and even for use in detecting a distance from the camera to the marker,” whereas the only accused ThingMark functionality is the use of IDs. As such, Applicant’s positions during prosecution requires that the scope of infringement of these Asserted Claims extend beyond the scope of the *Tapley* teachings, which is well beyond the functionality of the accused ThingMark, and it thus cannot infringe.

As such, the Complaint cannot possibly survive a Rule 12(b)(6) motion to dismiss because it is not plausible that the accused products meet each limitation of the asserted claims. *Ortiz*, 2023 WL 2904583, at *7.

B. Plaintiff Fails to State a Claim for Induced Infringement

Plaintiff's indirect infringement claims are also deficient and should be dismissed. As an initial matter, Plaintiff's failure to plausibly allege direct infringement precludes its claims of induced infringement. Beyond that failing, Plaintiff also failed to plead any knowledge of the patent, knowledge of infringement prior to the filing of this action, or a specific intent to induce infringement. Each of these failures independently warrants dismissal of Plaintiff's indirect infringement allegations.

1. Plaintiff's Indirect Infringement Claims Fail Without Direct Infringement

Plaintiff's indirect infringement allegations are insufficient as a matter of law as Plaintiff fails to plausibly allege direct infringement. *See supra* § IV.A. It is axiomatic that “[i]n order to succeed on a claim of inducement, the patentee must show, first that there has been direct infringement . . .” *Enplas*, 909 F.3d at 407 (citations omitted); *see also Intellectual Ventures*, 870 F.3d at 1329 (“A finding of direct infringement is a predicate to any finding of indirect infringement . . .”); *Ortiz*, 2023 WL 2904583, at *7. Plaintiff also failed to adequately plead its claims of induced infringement and these claims should be dismissed.

2. Plaintiff Fails to Allege the Requisite Knowledge for Indirect Infringement

Plaintiff's indirect infringement claims also fail because they do not plead the required knowledge of the Asserted Patents and knowledge of the alleged patent infringement. Courts have held, including this Court, that the knowledge requirements for indirect infringement require pre-suit knowledge. *See Ortiz*, 2023 WL 2904583, at *7 (dismissing indirect claims for not pleading sufficient facts that “would support an allegation of pre-suit knowledge”); *see also Aguirre v. Powerchute Sports, LLC*, No. SA-10-CV-0702 XR, 2011 WL 2471299, at *3 (W.D. Tex. June 17, 2011) (holding that reliance “on knowledge of [plaintiff's] patent after the lawsuit was filed . . . is

insufficient to plead the requisite knowledge for indirect infringement”).

Despite this clear requirement maintained by this Court, Plaintiff’s sole allegation of actual knowledge of each respective patent is a conclusory statement that the “service of this Complaint . . . constitutes actual knowledge of infringement as alleged here.” Dkt. No. 1 ¶¶ 15, 24, 33. This Court routinely rejects such allegations of knowledge. *Parus Holdings Inc. v. Apple Inc.*, No. 6:19-cv-432 (W.D. Tex. Feb. 20, 2020). Thus, because Plaintiff fails to allege pre-suit knowledge, it also fails to state a claim for indirect infringement. *See id.*; *see also Ortiz*, 2023 WL 2904583, at *7; *Aguirre*, 2011 WL 2471299, at *3; *Brandywine Commc’ns Techs., LLC v. T-Mobile USA, Inc.*, 904 F. Supp. 2d 1260, 1268-69 (M.D. Fla. 2012); *Xpoint Techs., Inc. v. Microsoft Corp.*, 730 F. Supp. 2d 349, 357 (D. Del. 2010).

Plaintiff’s inducement claims should be dismissed because the Complaint fails to satisfy key knowledge requirements of induced infringement.

3. Plaintiff Fails to Allege the Requisite Specific Intent for Induced Infringement

Plaintiff also fails to plead specific intent in support of its inducement claim. Allegations of specific intent require factual “evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.” *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006)).

Plaintiff’s allegations of specific intent amount to conclusory statements that Defendant “actively, knowingly, and intentionally continued to induce infringement” of the Asserted Patents. Dkt. No. 1 ¶¶ 17, 26, 35. Such conclusory allegations fail to present facts that demonstrate: (1) Defendant knew that the alleged acts infringed, and (2) Defendant knew that the promotion of their products would induce or encourage others to infringe the Asserted Patents. *See Addiction*, 620 F. App’x at 938 (“[S]imply recit[ing] the legal conclusion that Defendants acted with specific

intent” fails to plead “facts that would allow a court to reasonably infer that Defendants had the specific intent to induce infringement.”); *Affinity Labs of Texas, LLC v. Toyota Motor N. Am.*, No. W:13-CV-365, 2014 WL 2892285, at *7, *21 (W.D. Tex. May 12, 2014) (finding “Plaintiffs generalized allegations that Toyota induced others to infringe the Asserted Patents through its marketing and sales tactics are [] insufficient”).

These conclusory allegations fall significantly short of the standard maintained by this Court. To support specific intent, Plaintiff must include specific allegations mapping the advertisement or promotion to the performance of the claimed steps of the patent—i.e., “evidence of culpable conduct, directed to encouraging another’s infringement,” which it did not do. *Parity Networks*, 2019 WL 3940952, at *2 (citing *DSU Med.*, 471 F.3d at 1306); *see also Hypermedia Navigation LLC v. Google LLC*, No. 18-CV-06137-HSG, 2019 WL 1455336, at *3 (N.D. Cal. Apr. 2, 2019) (“In no way does the complaint detail how an end user would infringe Hypermedia’s patents by following instructions in the links provided in the complaint.”); *Dodots Licensing Sols. LLC v. Lenovo Holding Co., Inc.*, No. CV 18-098 (MN), 2018 WL 6629709, at *4 (D. Del. Dec. 19, 2018) (holding citations to websites were insufficient to plead specific intent).

Thus, Plaintiff’s inducement claims should be further dismissed because the Complaint is silent on key requirements of induced infringement.

V. CONCLUSION: THE PROPER REMEDY IS DISMISSAL.

The Complaint fails to state a claim upon which relief can be granted and lacks the required specificity for pleading a cause of action under Fed. R. Civ. P. 8 and *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007). The proper remedy is dismissal, and Defendant requests that this Court dismiss the Complaint under Fed. R. Civ. P. 12(b)(6) for failing to state a claim upon which relief can be granted.

Dated: October 20, 2023

Respectfully submitted by:

/s/Kara A. Specht

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on October 20, 2023.

/s/Kara A. Specht

Kara A. Specht